# INTERPRETING THE FINDINGS OF THE STATISTICAL ANALYSIS OF THE CPS SUPPLEMENT ON RACE AND ETHNICITY

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#### **ABSTRACT**

This paper will draw on the results of several cognitive research activities carried out in conjunction with the Current Population Survey (CPS) Supplement on Race and Ethnicity to improve the accuracy of interpretations drawn from the statistical analysis presented in the preceding paper by Tucker, Kojetin, and Harrison. During the May, 1995 CPS collection week, cognitive researchers monitored Supplement interviews in the Hagerstown and Tucson CATI facilities, conducted debriefing sessions with interviewers in both facilities to learn about their experiences in conducting the Supplement interviews, and accompanied CPS interviewers in Tucson and Miami to observe how the interviews were conducted in the field. In addition, 400 CATI interviews, 340 in English and 60 in Spanish, were taped for subsequent behavior coding.

A fifth set of cognitive research findings brought to the interpretation of the Supplement data is drawn from the cognitive research interviews conducted during the development of the Supplement questionnaire. These will be discussed under the following headings: Conceptual difficulties distinguishing race, ethnicity/ethnic origin and ancestry; and the "Multiracial" category. The last set of cognitive research data draws on a content analysis of open-ended answers to Supplement questions on multiracial status, and ancestry and ethnic origin.

The cognitive research findings will provide the basis for greater accuracy in interpreting the results of the statistical analysis of Supplement data. For example, the cognitive research data enable us to classify multiracial reporters as "Multiracials" and "Indeterminate Multiracials," and to consider the likely factors contributing to inaccurate multiracial reporting.

#### **KEYWORDS**

Multiracial, Race, Ethnicity, Ancestry

#### INTRODUCTION

As part of the long-term evaluation of the Office of Management and Budget (OMB) Standards for Race and Ethnic Classifications, a Supplement on Race and Ethnicity was included in the May, 1995 CPS. In the first paper presented in this session, Tucker, Kojetin, and Harrison provide an overview of the rationale for the CPS Supplement on Race and Ethnicity, the experimental design of the four Supplement Panels, the statistical methodology used to analyze the Supplement findings, and a discussion of the most important statistical findings. Cognitive research was used in the development of the Supplement questionnaire and in monitoring collection of the Supplement to address quality issues of data collection. (See McKay and de la Puente, 1995, for a discussion of cognitive research in developing and pre-testing the Supplement questionnaire.) This paper will draw on the results of several cognitive research activities carried out in association with the CPS Supplement on Race and Ethnicity in order to improve the accuracy of interpretations drawn from

the statistical analysis of findings on non-Hispanic multiracial reporters presented in the preceding paper (Tucker, Kojetin, and Harrison, In Press).

#### **METHODS**

The cognitive research activities carried out in association with development and evaluation of the CPS Supplement on Race and Ethnicity included: cognitive research interviews to pre-test the Supplement; monitoring CPS interviews at the Census CATI facilities in Hagerstown and Tucson during the May, 1995 CPS collection week; CATI interviewer debriefing at Hagerstown and Tucson; field observation of May, 1995 CPS Supplement interviews in Miami and Tucson; behavior coding of 400 CPS CATI interviews (including 60 Spanish interviews) tape-recorded at Hagerstown and Tucson during May, 1995; content analysis of open-ended answers to "Something else" racial entries for multiracial respondents; and content analysis of open-ended answers to the ancestry/ethnic origin question for single race and multiracial respondents.

# **Cognitive Research Interviews**

Eighty-three cognitive research interviews to pretest the Supplement were carried out in the winter of 1994 in the following locations with the populations indicated: Albuqueque (American Indians); Chicago (Blacks); Houston (Hispanics, Whites); New Orleans (Creoles); New York City (Hispanics, Whites); Rural California (Hispanics); Rural Mississippi (Blacks); Rural West Virginia (Whites); San Francisco (Asians and Pacific Islanders, Hispanics; Multiracials); Washington, DC (Asians and Pacific Islanders, Blacks, Hispanics, Multiracials, Whites). Respondents for each racial/ethnic group included those with less than a high school education as well as those with some years of college. The protocol for the interviews called for the respondent to paraphrase the questions, i.e., to tell the interviewer what the question meant in his or her own words. For questions containing terms of special interest to the Supplement, e.g., "race," "ethnicity/ethnic group," "multiracial," the respondent would also be asked to provide a definition of the terms in the context of the question.

The cognitive interview findings of relevance for multiracial reporting relate to discrepancies in "observer-classified" and "self-reported" multiracial status, and to respondents' comprehension of "multiracial," "race," and "ethnicity/ethnic group." In the cognitive interviews, all of the respondents offered some variant of "more than one race" in defining the term "multiracial." This led to use of the term "multiracial," rather than "more than one race," in the final version of the Supplement.

In recruiting "multiracial" respondents for the cognitive research interviews, we selected persons who had been identified as having parents of different racial backgrounds. However, two respondents who had been identified as "multiracial" by observers, did not identify themselves as "multiracial." One young man with one Hispanic and one Black parent chose the category "Black" on the race question. In cognitive debriefing, he stated that he selected that category because he is recognized as "Black" in his community. (It should also be noted that a majority of the Black respondents in rural Mississippi, while identifying as Black, mentioned that they had other racial strains in their make-up but did not consider these relevant for their identification as Black by their community.) Another young man, with an American Indian mother and an Hispanic father, self-identified as American Indian. Cognitive debriefing revealed that he had a poor relationship with his father and therefore wished only to be associated with his mother's group. Thus, persons who had been classified as "multiracial" by observers did not necessarily self-identify as multiracial.

The cognitive interview findings also revealed the opposite situation: persons classified by observers as members of a single racial group who self-identified as "multiracial." A college-educated White woman in a Washington suburb selected the "multiracial" category when responding to the question on race. Cognitive debriefing revealed that she chose the "multiracial" category because she was "half-Irish and half-Italian."

From the latter respondent, and from information gathered from probing respondents for their definitions of "race" and "ethnicity/ethnic group," we learned that race and ethnic group are overlapping concepts for some non-Hispanic as well as Hispanic individuals. The semantic overlap of race and ethnicity for Hispanics has been documented previously by Kissam, Herrera and Nakamoto (1993), Elias-Olivares and Farr (1991), and Bates et al (1994). Hahn (1992) has called for research on popular conceptions of race and ethnicity to reconcile the meanings associated with these terms for survey researchers and respondents.

## **Multiracial Reporting in the CPS Supplement**

In the May, 1995 CPS Supplement, the multiracial response category was listed on the race question for Panels 2 and 4. In Panel 2, the race question was preceded by a separate question on Hispanic origin. In Panel 4, "Hispanic, Latino, or of Spanish origin" was a response option on a combined race/Hispanic origin question. The wording of the race question for each of the two panels is provided below.

#### PANEL 2

SB3a Which one of the following list (are/is) (you/name)? [READ ENTIRE LIST TO THE RESPONDENT.] White; Black; American Indian, Eskimo, or Aleut; Asian or Pacific Islander; Multiracial; Something else; (DK); (R)

(If Multiracial on SB3a)

SB4a Which of the following list (do/does) (you/name) consider (yourself/himself/herself) to be? [READ ENTIRE LIST ENTER ALL THAT APPLY.] White; Black; American Indian, Eskimo, or Aleut; Asian/Pacific Islander; Something else; (DK); (R)

(If "Something else" on SB4a)	
SB4b What is that?	

#### PANEL 4

SD1a First, which one of the following list (are/is) (you/name)? [READ ENTIRE LIST TO RESPONDENT.] White; Black; Hispanic, Latino, of Spanish origin; American Indian, Eskimo, or Aleut; Asian or Pacific Islander; Multiracial; Something else; (DK); (R)

(If Multiracial on SD1a)

SD1c I will read the list again and ask you to tell me which ones you consider (yourself/name) to be. [READ ENTIRE LIST. ENTER ALL THAT APPLY.] White; Black; Hispanic, Latino, of Spanish origin; American Indian, Eskimo, Aleut; Asian or Pacific Islander; Something else; (DK); (R)

(If "Something else" on SD 1c) SD1b What is that?

The breakdown of racial identities for those who chose the multiracial response option on Panel 2 and on Panel 4 may be seen in Table 1.

Table 1. Multiracial Breakdown

	Panel			
	1	2	3	4
	%	%	%	%
Total Multiracial	-	1.65	-	1.55
no race / DK / NA	-	0.02	-	0.00
"Se" as only race	_	0.51	-	0.22
only 1 race	-	0.53	-	0.15
WB / BW	-	0.09	-	0.16
Amerind + 1 race	-	0.20	-	0.28
A/PI + 1 race	-	0.07	-	0.28
1 race + "Se"	-	0.16	-	0.07
Other 2 races	-	-	-	0.20
3 or more	-	0.08	-	0.21

We see on Table 1 that some respondents who identified as "multiracial" on Panel 2 and Panel 4 selected only one race on the follow-up question. An initial concern in the statistical analysis was that the cognitive research interviews had missed the fact that some CPS respondents would not know the meaning of "multiracial". The finding of a large group of "one-race multiracials" led us to develop the categories of "Multiracial" and "Indeterminate Multiracial" for analyzing the CPS Supplement data. For purposes of this analysis, the following definitions will be used:

<u>Multiracial</u>: persons who report belonging to 2 or more of the racial groups listed on the race question for that Panel;

<u>Indeterminate Multiracial</u>: persons who do not report belonging to 2 or more of the racial groups listed on the race question for that Panel.

A very large proportion of the "1-race multiracials" on Table 1 selected "Something else" as their single race, while a portion of the 2+ multiracials chose a single racial category and "Something else." From the cognitive research interviews, it had been observed that multiracial respondents who were asked to respond to race questions that did not offer the multiracial category most often chose

"Something else," and listed their several racial identities in the open-ended follow-up question. An analysis of the "open-ended" responses to the follow-up question for those who identified as "Something else" under Multiracial revealed a range of racial and ethnic designations.

# "One-race = 'Something else' Multiracials"

The open-ended answers for the "1-race = 'Something else' multiracial" respondents included such diverse entries as: Creole; Eurasian; mixed Black and White; Chinese and White; Cape Verdian; German and Irish. We have no explanation for why some CPS respondents chose not to report 2 of the categories on the list of response options for the race question, e.g., Black, White, but instead chose "Something else," under which they listed two of the races on the list. Some of the other entries, such as Creole and Eurasian, although single terms, do represent multiracial groups. Reporting two ethnicities, e.g., German and Irish, presents the overlapping of the semantic categories of race and ethnicity observed during the cognitive research interviews.

# "Two Races = Race + 'Something else' Multiracials"

A wide range of open-ended answers was found for the "Something else" follow-up question for multiracials who identified as belonging to one of the races on the list, e.g., Black, White, and as "Something else." The following "Something else" entries are preceded by the first letter of the race chosen from the list of racial response options: (W) Mexican, American Indian and German; (B) Puerto Rican and German and African American; (W) Armenian; (W) Italian and Dutch and Irish. Thus, the pattern of equating ethnicity and racial groups was common in these open-ended responses as well.

From the analysis of the "Something else" entries it became apparent that some of the "One-Race = 'Something else' Multiracials," e.g., Creole, mixed Black and White, *did fit* the definition of Multiracial constructed for the statistical analysis. The analysis also revealed that some of the "Two Races = Race + 'Something else' Multiracials" *did not fit* this definition, and should be classified as "Indeterminate Multiracials."

Following the analysis of the open-ended entries for one-race and two-race multiracials who identified as "Something else," the percentages of "Multiracials" and "Indeterminate Multiracials" were calculated. Table 2 presents the counts of both types of multiracials for Hispanic and for non-Hispanics. Persons who reported two or more of the racial categories other than "Something else" are also included in the "Multiracial" category.

Table 2. Percentage "Multiracials" and "Indeterminate Multiracials"

	Panel 2		Panel 4	
	M IM		M	IM
	%	%	%	%
Name 1 race				
Hispanic	2.24	10.74	0.0	0.71
Non-Hispanic	4.88	45.78	5.15	17.02

Name 2+ races				
Hispanic	3.58	4.61	22.79	0.0
Non Hispanic	26.03	2.34	52.46	1.88
Totals:	36.73	63.47	80.40	19.60

The initial racial breakdown of multiracials displayed previously in Table 1 indicated that about half of the one-race multiracials on both Panels had identified themselves as belonging to one of the racial groups other than "Something else." Observations made in the course of monitoring CPS Supplement interviews at the Hagerstown CATI facility provided a lead for the investigation of factors contributing to one-race reporting by some multiracial reporters. It had been observed that occasionally, a CPS respondent who identified as "multiracial" and listed only one race, e.g., White, would include a second race in answering the later ancestry/ethnic origin question. The wording and placement of the ancestry/ethnic origin question was identical across Panels. The question reads as follows:

Now, what is (your/name's) ancestry or ethnic origin?

\_\_\_\_\_

An analysis of entries to the ancestry/ethnic origin question for the 1-race "Indeterminate Multiracials" who had listed a single race other than "Something else" revealed that 54% of the 152 individuals in this group had listed a second race under ancestry. To learn how widespread this phenomenon was, an analysis of entries under ancestry was carried out for a random sample of 2000<sup>[1]</sup> Panel 2 and Panel 4 respondents, drawn proportional to the racial distribution for those two Panels, who had not identified as multiracial and had selected a racial response option other than "Something else." This latter group was designated "Single Race Respondents." For the Single Race Respondents, only 7% of the entries under ancestry included a second race not previouslynamed. These results are displayed in Table 3.

Table 3. Additional Races under ancestry for 1-Race "Indeterminate Multiracials and Single Race Respondents

	Additional Races	No Additional Races	Totals
(non-Hispanic) 1-Race "Indeterminate Multiracials"	82 (54%)	70 (46%)	152
(non-Hispanic) Single Race respondents	132 (07%)	1750 (94%)	1882

<sup>&</sup>lt;sup>1</sup> Over 100 of the cases selected in the random sample of 2000 Single Race Respondents had entries under ancestry that could not be coded for a second race. These entries included such items as: "Heinz 57," "American," and "A little bit of everything."

Totals	214	1820	2034
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While the sizes of the two groups are too small to estimate significance of the difference between the groups, there is a basis to suggest that the existence of a second racial group in their heritage contributed to the selection of the "multiracial" designation for many of the "1-race Indeterminate Multiracials." The fact that some individuals with two racial heritages chose to self-identify as "multiracial," while another group with two racial strains self-identified as a single race led to further investigation of these two groups. This took the form of comparing the two groups in terms of their racial composition, and on demographic characteristics from the CPS Control Card.

Tables 4 and 5 list the second race under ancestry for 1-race Indeterminate Multiracials and for Single Race Respondents.

Table 4. Second race under Ancestry for 1-Race "Indeterminate Multiracials"

			Second Race under Ancestry			
		Wh	Bl	AmInd/Esk/Al	Asian/PacIsl	Total
	White		7	20	13	40
First	Black	20		9	1	30
Race	AmInd, Eskimo, Aleut	9				9
	Asian/Pacific Islander	5				5
	Total	34	7	29	14	84

Table 5. Second race under Ancestry for Single Race respondents

			Second Race under Ancestry			
		Wh	Bl	AmInd/Esk/Al	Asian/PacIsl	Total
	White		5	91	5	101
First	Black	2		9		11
Race	AmInd, Eskimo, Aleut	2				2
	Asian/Pacific Islander					0
	Something else	9	1	5	1	16
	Total	13	6	105	6	130

While the overwhelming majority, 91 out of 130 (70%), of the Single Race Respondents reporting a second race under ancestry are Whites reporting an American Indian, Eskimo, or Aleutian racial component, the 1-race Indeterminate Multiracials are more varied in their racial composition. Whites constitute less than 50% of the latter group. Blacks at 36%, American Indians, Eskimos, and Aleuts at 11%, and to a lesser extent, Asians and Pacific Islanders at 6%, are over-represented in this group compared to the proportional racial distribution for the two Panels. Blacks and American Indian/Eskimo/Aleuts reporting White as their second race constituted a much larger percentage of the 1-race Indeterminate Multiracials, 35%, than they did for the Single Race Respondents, where they constituted only 3%. (See McKenney et al, 1993, and Snipp, 1986, for previous research on shifts in racial and ethnic identification in the U.S. census.)

### Demographic Characteristics from the CPS Control Card

The "1-Race Indeterminate Multiracials" and "Single Race Respondents" who had listed a second race under ancestry were compared on the following demographic variables which were available from the CPS control card: Household income; household size; Interview site; MSA status; Census place size; Poverty area; Region; Nativity; Mother's Nativity; Father's Nativity; When came to/were born in U.S.; Gender; Education; National origin; Relationship to reference person; Citizenship; Age; Labor force status; and Land usage. There was almost no difference between the two groups on most of these variables. The analysis does suggest possible differences between the two groups on the following demographic characteristics: Age; Owner/Renter, Region; Urban/Rural Area; and MSA status.

<sup>&</sup>lt;sup>2</sup> An average of the racial distributions for PANEL 2 and PANEL 4 yields the following percentages: Whites = 77.2%; Blacks = 10.5%; American Indians, Eskimos and Aleuts = <1%; Asians and Pacific Islanders = 3.3%.

Table 6. Percentages by Age 1-Race "Indeterminate Multiracials" and Single Races with 2nd Race in Ancestry

	< 30 years	30 - 49 years	50 years +
IM (n=84)	67.86	22.62	9.52
SR (n=132)	48.24	29.55	21.21

Table 7. Percentages Owners and Renters 1-Race "Indeterminate Multiracials" and Single Races with 2nd Race in Ancestry

	Owners	Renters
IM (n=84)	55.28	44.72
SR (n=132)	68.97	31.03

Table 8. Percentages Inside and Outside MSA 1-Race "Indeterminate Multiracials" and Single Races with 2nd Race in Ancestry

	Inside MSA	Outside MSA
IM (n=84)	82.14	17.86
SR (n=132)	65.91	34.09

Table 9. Percentages Urban/Rural 1-Race "Indeterminate Multiracials" and Single Races with 2nd Race in Ancestry

	Central City	Bal. of Urban	Other Urban	Rural
IM (n=84)	30.3	34.2	10.5	25.0
SR (n=132)	25.8	16.7	20.0	37.5

Table 10. Percentages Urban/Rural 1-Race "Indeterminate Multiracials" and Single Races with 2nd Race in Ancestry

	North East	North West	South	West
IM (n=84)	28.57	21.43	23.81	26.19
SR (n=132)	10.61	25.76	37.88	25.76

The Indeterminate Multiracials tended to be a younger group, with almost 70% under the age of 30 years, compared to the Single Race Respondents, with 50% over the age of thirty. More of the Single Race Respondents, 69%, were homeowners, compared to 55% of the Indeterminate Multiracials, but this might be a function of the older age distribution of the former group. A larger percentage of the Single Race Respondents, 34 %, lived outside a Metropolitan Statistical Area, compared to the 18% of the Indeterminate Multiracials. While the majority of Indeterminate Multiracials, 64%, lived within urbanized areas, this was true for only 41% of the Single Race Respondents.

Finally, while almost equal percentages of the two groups lived in the West and North West, there were differences in their distribution across the other two regions. Almost three times as many of the Indeterminate Multiracials, 29%, lived in the Northeast, compared to 11% of the Single Race Respondents. A little over one-third more of the Single Race Respondents, 39%, lived in the South, compared to 24% of the Indeterminate Multiracials.

#### CONCLUSIONS

Findings from the cognitive research carried out in conjunction with the CPS Supplement on Race and Ethnicity contributed to more accurate interpretation of the results of the statistical analysis of the CPS Supplement data. The insights provided by the cognitive research data led to more focused investigation of the circumstances associated with multiracial reporting, leading to the recognition of true multiracial status for a portion of the multiracials who reported a single race, i.e., "Something else." Similarly, this analysis led to the recognition of "Indeterminate Multiracial" status for a portion of multiracials who reported 2 races, i.e., a race plus "Something else."

Monitoring CATI interviews led to the realization that some multiracial respondents who listed a single race other than "Something else" on the race question would list a second race when answering the question on ancestry. This proved to be true for a majority of this group of 1-race "Indeterminate Multiracials." Analysis of the ancestry entries for a random sample of Single Race Respondents revealed that a much smaller percentage of such respondents listed a second race under ancestry. However, the presence of a second race under ancestry for seven percent of Single Race Respondents, who constitute the overwhelming majority of CPS respondents, represents a large potential pool of persons who might claim multiracial status if the category were regularly included on demographic survey forms.

Analysis of the racial composition and demographic characteristics of two groups of respondents who report a single race for the race question, a second race under ancestry, yet differ in whether or not they self-identified as "multiracial," yielded few details to distinguish the groups. While 70% of the Single Race Respondents listing a second race in ancestry were Whites with an American Indian ancestor, the racial composition of the 1-Race Indeterminate Multiracials was more varied. There were far more Blacks, and American Indian, Eskimo, Aleuts, who listed a White ancestor in the latter group. It is tempting to speculate that for those who self-identified as multiracial, the ancestor of the second race is separated by fewer generation than for those who self-identified as being of a single race. This information is not available from CPS Control Card data and represents a promising area for future cognitive research.

The available CPS control card data suggest that individuals with this racial make-up who self-identify as "multiracial" tend to be somewhat younger, more heavily distributed in the Northeast and in urban areas than those with similar racial make-up who do not choose the multiracial designation. More complete demographic profiles of these two groups await the results of future large-scale surveys targeted to racial and ethnic minorities.

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#### REFERENCES

BATES, Nancy A, M. DE LA PUENTE, T. J. DE MAIO, and E.A. MARTIN, "Research On Race And Ethnicity: Results From Questionnaire Design Tests," <u>Proceedings of the Bureau of the Census' 1994 Annual Research Conference</u>, Rosslyn, pp. 107-136.

ELIAS-OLIVARES, L. and M. FARR, <u>Sociolinguistic Analysis of Mexican-American Patterns of Non-Response to Census Questionnaires</u>. Report Submitted to the Census Bureau under Joint Statistical Agreement 88-25, Ethnographic Exploratory Research Report #16, 1991.

HAHN, Robert A., "The State of Federal Health Statistics on Racial and Ethnic Groups," J. Amer. Medical Assoc., Vol. 267, No. 2, 268-271, Jan. 8, 1992,

KISSAM, Edward, E. HERRERA, and J.M. NAKAMOTO, <u>Hispanic Response to Census Enumeration: Forms and Procedures</u>, Report submitted to the Census Bureau under Contract No. 50-YABC-2-66027, Task Order No. 46-YABC-2-0001, March, 1993.

McKAY, Ruth B. and M. DE LA PUENTE, "Cognitive Research In Designing The CPS Supplement on Race and Ethnicity," <u>Proceedings of the Bureau of the Census' 1995 Annual Research Conference</u>, Rosslyn, 435-445.

McKENNEY, Nampeo, C. BENNETT, R. HARRISON, and J. DEL PINAL, "Evaluating Racial And Ethnic Reporting In The 1990 Census." <u>Proceedings of the Survey Research Methods Section, American Statistical Association Meetings of 1993</u>, Vol. 1, 66-74.

SNIPP, Matthew C., "Who Are American Indians? Some Observations About the Perils and Pitfalls of Data for Race and Ethnicity." <u>Population Research and Policy Review</u> 5: 237-252, 1986.

TUCKER, N. Clyde, KOJETIN, B. A., and HARRISON, R., "A Statistical Analysis of the CPS Supplement on Race and Ethnic Origin, <u>Proceedings of the Bureau of the Census' 1996 Annual Research Conference</u>, Rosslyn, In Press.